I. INTRODUCTION

Purpose of Acquisition

The ownership of Heenan Lake, in combination with fishery management, ensures the continued survival of Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), a federal threatened species. The Department of Fish and Game (CDFG) operates and maintains an egg taking station near the lake on Heenan Creek, which provides Lahontan cutthroat trout stock to areas in California and Nevada.

The acquisition also affords protection to important summer deer range and migration corridors for the Carson River deer herd. In addition, the area just south of Heenan Lake has been identified as a holding area for the West Walker Deer Herd.

Acquisition History

The CDFG purchased in fee the Heenan Lake Wildlife Area (HLWA) on November 30, 1982 from the Trust for Public Land. Purchase price totaled \$902,500; of which \$526,850 was allocated from the 1982/83 Energy and Resources Fund, and \$375,650 from the Wildlife Restoration Fund. However, the original purchase of the HLWA did not include the water rights to Heenan Lake.

Recent (1996-2003) CDFG Departmental management accomplishments include, with the assistance of the Wildlife Conservation Board and Proposition 70 funding, the acquisition of 78.8% of the water rights associated with Heenan Lake. This represents 2,324 acre-feet of water storage in Heenan Lake and is deemed sufficient water to protect the Lahontan cutthroat trout broodstock population from potentially stressful summer and wintering lake conditions. The CDFG attempted to buy the remaining 22% of the lake's water right from the Parks Land and Livestock Company in 2005, but the owner was not interested in selling the right. In the future the CDFG would like to acquire the entire water right associated with Heenan Lake to ensure the future success of this fishery, provide downstream riparian restoration and additional flexibility in water management.

It was mandated in the Heenan Lake Operations, Maintenance, and Cost-Sharing Agreement dated May 25, 1999, by and among Danberg Holdings Nevada, LLC, Park Cattle Co., the Bently Family Limited Partnership, and the State of California, CDFG, that a minimum pool of 500 acre feet be maintained within the lake at all times.

Purpose of This Management Plan

The Heenan Lake Wildlife Area Land Management Plan (the Plan) will provide the framework necessary for implementing management goals (Section IV of this Plan). These goals were summarized following the recognition of the Heenan Lake Wildlife Area (HLWA) as an important operational base for the rearing of Lahontan cutthroat trout and acquisition of the property by the CDFG. In addition, the Plan addresses the CDFG staff's intent to protect the Carson River deer herd migration corridor and bald eagle (Haliaeetus leucocephalus) foraging habitat, while implementing overall habitat

enhancement practices. The CDFG is also investigating the feasibility of maintaining aspen stands by suppressing aspen rust and encroachment of conifers. The following management goals were identified during the initial acquisition process and were summarized in the Heenan Lake Wildlife Area Management Plan of 1990. These goals are still the basis for establishing current management practices at Heenan Lake:

- 1) Maintain Heenan Lake and adjacent riparian habitat in a healthy manner to insure growth of Lahontan cutthroat trout into healthy brood stock.
- 2) Retain and enhance the wide diversity of existing vegetative communities with emphasis on riparian, meadow habitats, and preventing juniper encroachment in aspen stands.
- Monitor representative species to indicate health of habitat types on the wildlife area, and enhance habitats for sage grouse, and maintain populations of bald eagles.
- 4) To provide public use recreational activities that do not conflict with the primary objectives of the acquisition.
- 5) To monitor the area for building, dam, and fence maintenance; management activities and their effectiveness.
- 6) Maintain the public fishing and hunting programs.

II. PROPERTY DESCRIPTION

Description

The HLWA consists of Heenan Lake, Heenan Creek, and surrounding lands totaling 1,652 acres (**Figure 1**) (**Photo 1**). Heenan Lake covers 130 surface acres and has a capacity of 3,000 acre feet. The spillway elevation is 7,076 feet while the elevation of the wildlife area rises to slightly over 8,000 feet. Historically, the property was used primarily for grazing. Historic cattle use has been moderate to heavy. Minor erosion (head-cutting) is evident in the meadow at the head of Heenan Creek and in the meadow on the southern end of the HLWA.

The HLWA is located about seven miles southeast of Markleeville, California in eastern Alpine County. It is in a mountainous setting on the west side of Monitor Pass and may be reached via State Highway 89 (**Figure 1** and **Figure 2**). The property includes all, or portions of, Sections 1, 2, 3, 10 and 11 in Township 9 north, Range 21 east of the Heenan Lake U.S. Geological Survey quadrangle.

The ridges are covered with shrubs such as sagebrush (*Artemisia tridentata*), bitterbrush (*Purshia tridentata*), gooseberry (*Ribes* sp.), western blueberry (*Vaccinium occidentale*), western juniper (*Juniperus occidentalis*), and mountain mahogany (*Cercocarpus ledifolius*). East slopes contain the conifers, Jeffery pine (*Pinus jeffreyi*) and white fir (*Abies concolor*). Aspens (*Populus tremuloides*) occur on the damp slopes in areas across the HLWA. Willows (*Salix* sp.), aspen, grasses, and forbs are found along the drainages of Heenan Creek. Lower elevations, south of Heenan Lake, are dominated by sagebrush, grasses, and forbs.